

Search for 09/123483

WEST

Help

Logout

Interrupt

Main Menu

Search Form

Posting Counts

Show S Numbers

Edit S Numbers

Preferences

Search Results -

| Term | Documents |
|---|-----------|
| RANDOM.DWPI,EPAB,JPAB,USPT. | 279133 |
| RANDOMS.DWPI,EPAB,JPAB,USPT. | 31 |
| PRIMER\$1 | 0 |
| PRIMER.DWPI,EPAB,JPAB,USPT. | 58978 |
| PRIMERA.DWPI,EPAB,JPAB,USPT. | 26 |
| PRIMERC.DWPI,EPAB,JPAB,USPT. | 2 |
| PRIMERD.DWPI,EPAB,JPAB,USPT. | 1 |
| PRIMERE.DWPI,EPAB,JPAB,USPT. | 6 |
| PRIMERF.DWPI,EPAB,JPAB,USPT. | 1 |
| PRIMERM.DWPI,EPAB,JPAB,USPT. | 1 |
| (L2 AND RANDOM PRIMER\$1).USPT,JPAB,EPAB,DWPI. | 0 |

There are more results than shown above. [Click here to view the entire set.](#)

Database: US Patents Full-Text Database ▲
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins ▼

Refine Search: 12 and random primer\$1 ▲
▼ Clear

Search History

Today's Date: 2/25/2001

| DB Name | Query | Hit Count | Set Name |
|---------------------|--|-----------|-----------|
| USPT,JPAB,EPAB,DWPI | 12 and random primer\$1 | 0 | <u>L3</u> |
| USPT,JPAB,EPAB,DWPI | 11 and polymerase chain reaction\$1 | 6 | <u>L2</u> |
| USPT,JPAB,EPAB,DWPI | nucleotide\$1 near5 second label\$1 near5 label\$1 | 11 | <u>L1</u> |

WEST

Generate Collection

L2: Entry 2 of 6

File: USPT

Aug 1, 2000

US-PAT-NO: 6096499

DOCUMENT-IDENTIFIER: US 6096499 A

TITLE: Mammalian DNA primase screen and activity modulating agents

DATE-ISSUED: August 1, 2000

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|--------------------|------------|-------|----------|---------|
| Kozlowski; Michael | Palo Alto | CA | N/A | N/A |
| Aimi; Junko | San Carlos | CA | N/A | N/A |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|-------------------|------------|-------|----------|---------|-----------|
| Geron Corporation | Menlo Park | CA | N/A | N/A | 02 |

APPL-NO: 8/ 828192

DATE FILED: March 21, 1997

PARENT-CASE:

CROSS REFERENCE TO RELATED APPLICATIONS This application is a continuation-in-part of U.S. patent application Ser. No. 08/624,343 by Kozlowski, filed Mar. 22, 1996 (now abandoned), which is incorporated herein by reference for all purposes.

INT-CL: [7] C12Q 1/68

US-CL-ISSUED: 435/6; 435/15, 435/18, 435/29, 435/32, 435/69.1, 435/91.1, 514/2, 514/44

US-CL-CURRENT: 435/6; 435/15, 435/18, 435/29, 435/32, 435/69.1, 435/91.1, 514/2, 514/44

FIELD-OF-SEARCH: 435/6, 435/8, 435/10, 435/15, 435/18, 435/29, 435/32, 435/69.1, 435/91.1, 436/501, 514/2, 514/44, 536/23.1, 536/24.1, 536/24.3-33, 935/77, 935/78

REF-CITED:

U.S. PATENT DOCUMENTS

☐ Search Selected☐ Search ALL

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|---|---------------|---------------|----------|
| <input type="checkbox"/> <u>5360714</u> | November 1994 | Seeger | 435/5 |
| <input type="checkbox"/> <u>5677152</u> | October 1997 | Birch et al. | 435/91.2 |

FOREIGN PATENT DOCUMENTS

| FOREIGN-PAT-NO | PUBN-DATE | COUNTRY | US-CL |
|----------------|--------------|---------|-------|
| WO90/00624 | January 1990 | WOX | |

OTHER PUBLICATIONS

WEST

Generate Collection

L2: Entry 2 of 6

File: USPT

Aug 1, 2000

DOCUMENT-IDENTIFIER: US 6096499 A

TITLE: Mammalian DNA primase screen and activity modulating agents

BSPR:

In a variation, labeled nucleotides bear distinct labels to distinguish template versus non-template directed polymerization in a DNA primase reaction or coupled DNA primase/DNA polymerase reaction. A first labeled nucleotide species having a first label is incorporated in polynucleotides produced from template-directed polynucleotide synthesis, such as DNA primase-catalyzed oligoribonucleotide primer synthesis or DNA primase/DNA polymerase-catalyzed elongation of a oligoribonucleotide primer by template-directed polymerization. A second labeled nucleotide species having a second label which can be distinguished or discriminated (i.e., is separately detectable) from the first label of the first nucleotide species is incorporated substantially only in polynucleotides produced by untemplated polymerization. In this variation, a "nucleotide deficient template" serves as a primase template, and is a homopolymer or a heteropolymer polynucleotide composed of residues of two or three deoxyribonucleotide species (i.e., the template lacks at least one dNTP species) wherein at least one of said deoxyribonucleotide residues is a complement nucleotide of the first labeled nucleotide, and wherein none of said deoxyribonucleotide residues is a complement nucleotide of said second labeled nucleotide, whereby template-directed polynucleotide synthesis by DNA primase or DNA primase/DNA polymerase yields a product polynucleotide comprising an incorporated (i.e., polymerized) residue of said first labeled nucleotide species and substantially lacking incorporated residues of said second labeled nucleotide species (except for minor misincorporation errors inherent in polynucleotide polymerases). The second labeled polynucleotide species is complementary to a dNTP species which is not present in the nucleotide-deficient template, and therefore polynucleotide products of the reaction having incorporated second labeled nucleotide residues substantially represent reaction products generated by untemplated polymerization. The method employs a DNA primase and/or DNA primase/DNA polymerase reaction comprising: (1) a nucleotide-deficient template and substantially lacking other template species; (2) a first labeled nucleotide species and a second labeled nucleotide species, and optionally unlabeled nucleotide species such that the reaction contains nucleotide species (either labeled and unlabeled)

DEPR:

In vitro amplification techniques are suitable for amplifying RNA or DNA sequences for use as molecular probes, RNA endonucleases (i.e., where the RNA is a ribozyme) or generating nucleic acids for subsequent subcloning. Examples of techniques sufficient to direct persons of skill through such in vitro amplification methods, including the polymerase chain reaction (PCR) the ligase chain reaction (LCR), Q.beta.-replicase amplification and other RNA polymerase mediated techniques (e.g., NASBA) are found in Berger, Sambrook, and Ausubel, as well as Mullis et al., (1987) U.S. Pat. No. 4,683,202; PCR Protocols A Guide to Methods and Applications (Innis et al. eds) Academic Press Inc. San Diego, Calif. (1990) (Innis); Arnheim & Levinson (Oct. 1, 1990) C&EN 36-47; The Journal Of NIH Research (1991) 3, 81-94; (Kwoh et al. (1989) Proc. Natl. Acad. Sci. USA 86, 1173; Guatelli et al. (1990) Proc. Natl. Acad. Sci. USA 87, 1874; Lomell et al. (1989) J. Clin. Chem 35, 1826; Landegren et al., (1988) Science 241, 1077-1080; Van Brunt (1990) Biotechnology 8, 291-294; Wu and Wallace, (1989) Gene 4, 560; Barringer et al. (1990) Gene 89, 117, and Sooknanan and Malek (1995) Biotechnology 13: 563-564.

- Reiter et al., European Journal of Biochemistry, vol. 164, pp. 59-63, 1987.
Gronostajski et al. (1984) Journal of Biological Chemistry, vol. 259, No. 15, pp. 9479-9486.
Matthews et al. (1988) Analytical Biochemistry, vol. 169, pp. 1-25.
Bruckner et al. (1995), "The mouse DNA polymerase .alpha.-primase subunit p48 mediates species-specific replication of polyomavirus DNA in vitro," Mol. Cell. Biol. 15:1716-1724.
Copeland and Wang (1993), "Enzymatic characterization of the individual mammalian primase subunits reveals a biphasic mechanism for initiation of DNA replication," J. Biol. Chem. 268:26179-26189.
Copeland and Tan (1995), "Active site mapping of the catalytic mouse primase subunit by alanine scanning mutagenesis," J. Biol. Chem. 270:3905-3913.
Kuchta et al. (1990), "DNA Primase," J. Biol. Chem. 265:16158-16165.
Kuchta et al. (1992), "Inhibition of DNA primase and Polymerase .alpha. by arabinofuranosyl nucleoside triphosphates and related compounds," Biochemistry 31:4720-4728.
Miyazawa et al. (1993), "Molecular cloning of the cDNAs for the four subunits of mouse DNA polymerase .alpha.-primase complex and their gene expression during cell proliferation and the cell cycle," J. Biol. Chem. 268:8111-8122.
Prussak et al. (1989), "Mouse primase p49 subunit molecular cloning indicates conserved and divergent regions," J. Biol. Chem. 264:4957-4963.
Santocanale et al. (1992), "Overproduction and functional analysis of DNA primase subunits from yeast and mouse," Gene 113:199-205.
Stadlbauer et al. (1994), "DNA replication in vitro by recombinant DNA-polymerase-.alpha.-primase," Eur. J. Biochem. 222:781-793.
Stillman (1989), "Initiation of eukaryotic DNA replication in vitro," Ann. Rev. Cell. Biol. 5:197-245.
Thompson and Kuchta (1995), "Arabinofuranosyl nucleotides are not chain-terminators during initiation of new strands of DNA by DNA polymerase .alpha.-primase," Biochemistry 34:11198-11203.
Waga and Stillman (1994), "Anatomy of a DNA replication fork revealed by reconstitution of SV40 DNA replication in vitro," Nature 369:207-212.
Wang (1991), "Eukaryotic DNA polymerases," Ann. Rev. Biochem. 60:513-552.
Catapano, C.V., et al., Inhibition of Primer RNA Formation in CCRF-CEM Leukemia Cells by Fludarabine Triphosphate, Cancer Res., Apr. 1, 1991, vol. 51, No. 7, pp. 1829-1835.
Sheaff, R.J. calf Thymus DNA Polymerase Alpha-Primase: "Communication" and Primer-Template Movement Between the Two Active Site, Biochemistry, 1994, vol. 33, No. 8, pp. 2247-2254.

ART-UNIT: 165

PRIMARY-EXAMINER: Marschel; Ardin H.

ATTY-AGENT-FIRM: Earp; David J.

ABSTRACT:

The invention provides DNA primase assays suitable for identifying DNA primase modulating agents, methods of modulating DNA primase activity and compositions which modulate DNA primase.

12 Claims, 1 Drawing figures